

Cancer treatment—brachytherapy dose rate, code N

Identifying and definitional attributes

Metadata item type:	Data Element
Short name:	Brachytherapy dose rate
Synonymous names:	Brachytherapy modality
METEOR identifier:	468137
Registration status:	<ul style="list-style-type: none">• Health, Standard 04/02/2015
Definition:	The dose rate of brachytherapy administered during the course of treatment for cancer, as represented by a code.
Data Element Concept:	Cancer treatment—brachytherapy dose rate

Value domain attributes

Representational attributes

Representation class:	Code
Data type:	Number
Format:	N
Maximum character length:	1

Permissible values:

Value	Meaning
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1	Low dose rate (LDR)
2	Medium dose rate (MDR)
3	High dose rate (HDR)
4	Pulsed dose rate (PDR)

Supplementary values:

Value	Meaning
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7	Not applicable, no brachytherapy administered
8	Unknown whether brachytherapy administered
9	Brachytherapy administered but dose not available/inadequately specified

Collection and usage attributes

Guide for use:	The brachytherapy dose rate refers to the amount of radiation delivered by the source in Grays per hour (Gy/h).
	CODE 1 Low dose rate (LDR)
	Brachytherapy with a radiation source that emits up to 2 Gy/h.
	CODE 2 Medium dose rate (MDR)
	Brachytherapy with a radiation source that emits 2 Gy/h to 12 Gy/h.
	CODE 3 High dose rate (HDR)
	Brachytherapy with a radiation source that exceeds 12 Gy/h.
	CODE 4 Pulsed dose rate (PDR)
	Brachytherapy involving short pulses of radiation, which simulates an overall rate equivalent to LDR.

Source and reference attributes

Submitting organisation:	Cancer Australia
Reference documents:	Thomadsen BR et al. (2005). Brachytherapy Physics. Medical Physics Publishing.
	Peinemann F, Grouven U, Hemkens LG, Bartel C, Borchers H, Pinkawa M, Heidenreich A, Sauerland S (2011). Low-dose rate brachytherapy for men with localized prostate cancer. Cochrane Database of Systematic Reviews, Issue 7. Art. No.: CD008871.
	Kubo DH, Glasgow GP, Pethel TD, Thomadson BR, Williamson JF (1998). High dose-rate brachytherapy treatment delivery: Report of the AAPM Radiation Therapy Committee Task Group No. 59. Medical Physics, 25(4), 376-403.

Data element attributes

Collection and usage attributes

Guide for use:	Record the appropriate code for the dose rate of brachytherapy administered.
	Brachytherapy is delivered by placing the radiation source in close proximity to the tumour site. The radioactive isotopes are sealed in tiny pellets or "seeds" which are placed in the body using delivery devices such as needles or catheters. Types include interstitial brachytherapy, which uses a source placed within tumour tissue, for example, within a prostate tumour; and intracavitary brachytherapy, whereby the source is placed within a surgical cavity or a body cavity. Brachytherapy can involve the temporary or permanent placement of radioactive sources.
	Brachytherapy is likely to be delivered to admitted patients.
Collection methods:	The radiotherapy treatment modality will typically be found in the radiation oncologist's summary letter for the course of treatment or in the radiotherapy treatment summary in the patient's medical record.
	Determining the brachytherapy type may require assistance from the radiation oncologist for consistent coding.
Comments:	To evaluate patterns of radiotherapy care and analyse patient outcomes, it is necessary to know which treatment modalities were employed in the delivery of treatment.

Source and reference attributes

Submitting organisation:	Cancer Australia
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- Reference documents:**
- American College of Surgeons 2002. Facility Oncology Registry Data Standards (FORDS), 2009 revision. Commission on Cancer
 - American College of Surgeons 1998. Standards of the Commission on Cancer: Registry Operations and Data Standards (ROADS), Volume II. Commission on Cancer
 - Cancer Institute NSW 2006. NSW Clinical Cancer Registration: Minimum Data Set Data Dictionary, version 1.9 draft

Relational attributes

Related metadata references:

- See also [Cancer treatment—brachytherapy indicator, yes/no code N](#)
- [Health](#), Standard 14/05/2015
- See also [Cancer treatment—radiation dose administered, total Gray N\[NN.NN\]](#)
- [Health](#), Superseded 08/05/2014
- See also [Cancer treatment—radiation dose administered, total Gray N\[NN.NN\]](#)
- [Health](#), Standard 08/05/2014
- See also [Cancer treatment—radiotherapy completion date, DDMMYYYY](#)
- [Health](#), Superseded 08/05/2014
- See also [Cancer treatment—radiotherapy fractions administered, total fractions N\[N\]](#)
- [Health](#), Superseded 08/05/2014
- See also [Cancer treatment—radiotherapy fractions administered, total fractions N\[N\]](#)
- [Health](#), Standard 08/05/2014
- See also [Cancer treatment—radiotherapy start date, DDMMYYYY](#)
- [Health](#), Superseded 08/05/2014
- See also [Cancer treatment—radiotherapy start date, DDMMYYYY](#)
- [ACT Health \(retired\)](#), Candidate 08/08/2018
 - [Health](#), Standard 08/05/2014
- See also [Cancer treatment—radiotherapy target site, code N\[N\]](#)
- [Health](#), Superseded 08/05/2014

Implementation in Data Set Specifications:

[Adolescent and young adult cancer \(clinical\) DSSHealth](#), Superseded 14/05/2015

Conditional obligation:

Complete this item if Cancer treatment—radiotherapy treatment type, code N[N] indicates the use of brachytherapy.

DSS specific information:

This is to be collected for the initial course of treatment.

[Adolescent and young adult cancer \(clinical\) NBPDSHealth](#), Standard 14/05/2015

Conditional obligation:

Complete this item if Cancer treatment—radiotherapy treatment type, code N[N] indicates the use of brachytherapy.

DSS specific information:

This is to be collected for the initial course of treatment.

[Prostate cancer \(clinical\) NBPDSHealth](#), Standard 14/05/2015

Conditional obligation:

Collect if [Cancer treatment—brachytherapy, yes/no code N](#) equals yes.